

11-11,26(1) PHASE I BOOK EXPLOITATION

Mianaglov, Aleksandr Ivanovich, Georgii M...
Vladimir Vladimirovich Borisov, Leonid...
Kvasnikov, and Nikolay Ivanovich Mar...

Ratovny protsess i raschet kamer sgoraniya...
dvigateley (The Operation and Calculation...
Chambers of Gas-Turbine Engines) Moscow...
274 p. (Series: Moscow. Aviatstroy...
Sergo Ordzhonikidze. Trudy, vyp. 10. B...
1,010 copies printed.

Ed.: S. I. Bumshteyn, Engineer; Ed. of Photo...
Vizografskaya; Tech. Ed.: V. P. Roznits...
Zaymovskaya, Engineer.

PURPOSE This book is intended for scientists and
engineers engaged in designing combustion...
turbine engines, and also for students...
in this general field.

Card 1/6

The Operation and Calculation (Cont.),

COVERAGE: The book contains experimental and theoretical data on the dynamic structure of flow in combustion chambers. It includes calculations for gas and air conditions, the velocity of flow in the gas flow, and the description of the experimental method of the investigation. On the basis of the experimental data obtained, an analysis of the operation of the combustion chamber is given. The book also contains a description of the design and verification calculations for combustion chambers, the calculation of the structure of flow, the calculation of the concentration of the fuel mixture, and the calculation of the concentration of the fuel mixture. The book was written by N.V. Inozemtsev, Chapter II by N.V. Inozemtsev, Chapter III by A.I. Mikhailov, Chapter IV by V.V. Borisev, Chapter VII by N.I. Markov, Chapter VIII by E.L. Solokhin. Section 2 of Chapter I, the calculation of the concentration of the fuel mixture, was also contributed by E.L. Solokhin. The experimental work and the preparation of the experimental data was done by G.G. Gakhun, E.L. Solokhin, S.I. Markov, A.I. Polyakov, Yu. G. Rykov, A.I. Vinogradov, V.A. Gakhun, E.L. Solokhin, and A. V. Garvacheva. There are 34 pages of text.

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The Operation and Calculation (Cont.)

SOV/2391

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zone of ionic conductivity of gas during combustion 256

Bibliography 257

AVAILABLE: Library of Congress

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IMS/ec
9-10-11

BRANDELIS, Aleksandr Moiseyevich; USTINOV, N.V., nauchnyy red.;
MIKHAYLOV, A.I., nauchnyy red.; GORYUNOVA, L.K., red.; TOKER,
-A.P., tekhn. red.

[Operator of automatic lathes] Avtomatchik na tokarnykh avto-
matak. Moskva, Vses.uchebno-pedagog. izd-vo Proftekhizdat,
1961. 230 p. (MIRA 15:4)
Lathes) (Automatic control)

PHASE I BOOK EXPLOITATION

SOV/6072

Mikhaylov, A. I., V. V. Borisov, and E. K. Kalinin

Gazoturbinnyye ustanovki zamknutogo tsikla; teoriya i raschet (Closed-Cycle Gas Turbine Plants; Theory and Design). Moscow, Izd-vo AN SSSR, 1962. 145 p. Errata printed on the inside of back cover. 4000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut dvigateley.

Ed. of Publishing House: V. M. Klennikov; Tech. Ed.: G. A. Astaf'yeva.

PURPOSE: This book is intended for designers and for scientific and engineering personnel.

COVERAGE: The book reviews works on the method of calculation of closed-cycle gas turbine engines, with particular attention paid to the design of a stage of turbomachines working on various gases. Methods of calculating heat exchangers are given and means of reducing their weight and dimensions are indicated. Information on atomic gas turbine engines, based on non-

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Closed-Cycle Gas Turbine Plants; Theory and Design

80V/6072

Soviet sources, is included. No personalities are mentioned. There are 57 references: 26 Soviet, 28 English, and 3 German.

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1. Determination of gas parameters along the flow passage area of a CCGTE	12
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Card 2/0	

CHEREVATKIN, V.F., inzh.; IL'IN, A.P., inzh.; MIKHAYLOV, A.I.

Obtaining napron powder from rubber fumes. Vest. Mashinost.
43 no. 12.36-37 D 1963. (MIRA 1968)

L 17925-65 EWT(1)/EWP(m)/EPP(c)/EPT(n)-2/EWA(d)/EPR/T/EPA(bb)-2/FCS(k)/EWA(1)
Pd-1/Pr-4/Ps-4/Pu-4 AFWL/AEDC(a)/BSD/ASD(f)-2/SSD WW

ACCESSION NR: AP4048850

S/0170/64/000/011/0042/0046

AUTHORS: Mikhaylov, A. I.; Kalinin, Z. K.; Dreytser, G. A.

TITLE: Investigation of hydraulic resistance for longitudinal air flow from a staggered tube bundle B

SOURCE: Inzhenerno-fizicheskiy zhurnal, no. 11, 1964, 42-46

TOPIC TAGS: gas discharge, gas flow, hydraulic resistance, tube bundle, isothermal flow, Reynolds number

ABSTRACT: The results of experimentation on hydraulic resistance of a staggered tube bundle are presented. A 19-tube bundle with $s/d = 1.2$ was used. Experiments were carried out for both isothermal flow and flow with heating and cooling. Heating was produced electrically and cooling by means of a hydraulic system. The tubes were specially calibrated with an internal diameter of 11 mm; flow, temperature, and pressure were subjected to careful instrumentation in heating and cooling devices and along the tube surfaces and tube cells. Formulas are given for computing resistance coefficient and Reynolds number. Results of the isothermal tests are given in a plot showing comparisons with earlier work and with theory. Special attention was given to transition from laminar to turbulent flow. Empirical

Card 1/2

L-17925-65

ACCESSION NR: AP4048850

Formulas are presented for calculating resistance over the range $10^3 < Re < 4.5 \cdot 10^5$ and $4.5 \cdot 10^3 < Re < 10^5$. The nonisothermal tests were carried out for a temperature factor ranging from 0.88 to 1.25 and under the condition of coincident directions of forced and free convection. For $Re < 5000$, the resistance coefficient proved to be about 15% higher than that for isothermal flow. Correction factors account for the nonisothermal effect on flow friction. This effect was found to be negligible with cooling. The friction resistance was found empirically to vary as $\lambda = (0.316 s/d - 0.176) Re^{-0.2}$, with the s/d ratio and Reynolds number. Orig. art. has: 5 equations and 2 figures.

ASSOCIATION: Aviatsionnyy institut im. Sergo Ordzhonikidze, Moscow (Moscow Aviation Institute)

SUBMITTED: 26Jul63

ENCL: 00

SUB CODE: ME

NO REF SOV: 005

OTHER: 004

Card 2/2

03000-66 001(m)/I GD-2

ACC NR: AP6002891

SOURCE CODE: UR/0286/65/000/024/0048/0048

INVENTOR: Kazanskiy, G. S.; Mikhaylov, A. I.; Chekhlov, K. V.

ORG: none

TITLE: Induction electrodes for determining the position of a beam of charged particles. Class 21, No. 177000 [announced by Joint Institute for Nuclear Research (Ob'yedinennyy institut yadernykh issledovaniy)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 48

TOPIC TAGS: conductor, acceleration, charged particle, electrode, particle beam, particle acceleration, particle accelerator component, alternating magnetic field

ABSTRACT: The induction electrodes for determining the position of a beam of charged particles, made in the form of a parallelepiped and set in the aperture of an accelerating chamber, are characterized by the fact that they are produced in the form of a metallic grid with conductors insulated from each other, inserted between two dielectric plates of the parallelepiped walls, and connected to each other at one point. These characteristics were incorporated into the design in order to distribute the induction electrodes over any bearing of an accelerator orbit in an alternating magnetic field.

SUB CODE: 20, 09/ SUBM DATE: 24Jul64

Cord 1/1

UDC 621.384.6

MIKHAYLOV, A. I.,

LL

"On the Functioning of the All-Union Institute for Scientific and Technical Information of the USSR Academy of Sciences." Area II pp. 1-5.

Director, All-Union Institute for Scientific and Technical Information,
Academy of Sciences, USSR. [Russian reference from "Preprint" Paper
for the International Conference on Secretive Information", Washington,
D. C., November 1967. Available: NAS-NR Library.]

VLEDUTS, G.E.; KAFAROV, V.V., red.; LISICHKIN, S.M., red.;
MIKHAYLOV, A.I., red.; SEMENOV, Yu.V., red.;

[Scientific information problems in the field of chemistry]
Nekotorye voprosy nauchnoi informatsii v oblasti khimii.
Moskva, Izd-vo AN SSSR. No.1. [Ways of improving the sys-
tematization of chemical indexes] O putiakh usovershenstvo-
vaniia sistematiki khimicheskikh ukazatelei. 1958. 77 p.
(Chemistry--Abstracting and indexing) (MIRA 16:10)

9(5)

AUTHOR:

Mikhaylov, A. I., Doctor of Technical Sciences

SOV/30-59-6-15/40

TITLE:

International Conference on Scientific Information
(Mezhdunarodnaya konferentsiya po nauchnoy informatsii)

PERIODICAL:

Vestnik Akademii nauk SSSR, 1959, Nr 6, pp 103-106 (USSR)

ABSTRACT:

In November 1959 (Abstracter's note: obviously a printing error) this Conference which had been organized by scientific institutions of the USA took place in Washington. It was attended by more than 900 delegates among them more than 100 from 23 foreign countries. The Conference discussed 75 reports on problems of scientific and technical information. 2 lectures were delivered by Soviet experts. A. I. Mikhaylov reported "On the Activity of the All-Union Institute for Scientific Information" and V. P. Cherenin on "Important Tasks of Information and Some Methods for Their Solution". At the request of the organizers of the Conference the author of this article reported on the working experience of the VINITI gained in the course of 6 years and the beginning of the publication of a monographic series "Itogi nauki" on the basis of the "Referativnyy zhurnal". Beginning with 1959 the VINITI plans ✓

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International Conference on Scientific Information

SOV/30-59-6-15/40

the publication of a special periodical bulletin on the information activity in the Soviet Union as well as abroad. The Conference recommended English and Russian and, in ten years, Chinese as international languages of science and engineering. About 50% of the reports presented dealt with the development of theoretical and practical problems of mechanization of information. At the conference an exhibition of modern electromechanical, photographic and electronic apparatus was shown. The photoelectronic system "Minicard" of the firm "Rekodak", a subsidiary company of "Eastman Kodak" met with the special interest of the Soviet delegates. The establishment of an international center for scientific and technical information was refused because it cannot practically be carried out under the conditions of the cold war. In conclusion, the Conference is commented as factual and useful. ✓

Card 2/2

MIKHAYLOV, A.I., prof.; TAREYEV, E.M., prof.

[Scientific information in the field of electric and power engineering] Nauchnaya informatsiya v oblasti elektrotekhniki i energetiki; lektsiya. Moskva, Vses. zaochnyi energ. in-t, 1961. 17 p. (MIRA 16:12)

1. Direktor Vsesoyuznogo instituta nauchnoy i tekhnicheskoy informatsii (for Mikhaylov). 2. Zaveduyushchiy kafedroy elektroizolyatsionnoy i kabel'noy tekhniki Vsesoyuznogo zaochnogo energeticheskogo instituta (for Tareyev).

(Power engineering--Information services)

MIKHAYLOV, A.I., prof.

Technical progress and the problems of scientific information.
Vest. AN SSSR 32 no.2:29-34 F '62. (MIRA 15:2)
(Science—Information services)

MIKHAYLOV, A.I.

Problems of scientific information. NTI no.1:3-6 '63.
(MIRA 1c:8)

MIKHAYLOV, A.I.; POLUSHKIN, V.A.

The theory of scientific information is a new independent
scientific discipline. NTI no.3:3-5 '63. (MIRA 16:11)

M. ABAYAK, A. J., 1-10.

Identify the source of the information and the person who
provided it. (See also 1-14.)

NOIA 1016

1. The source of the information is the person who provided it.

MIKHAYLOV, Alexander Ivanovich; CHERNYY, Arkadiy Ivanovich;
SILYAREVSKIY, Rodzhenko Sergeyevich

[Principles of scientific information] Osnovy nauchnoi
informatsii. Moskva, Nauka, 1965. 654 p.
(MIRA 18:9)

MIKHAYLOV, A.I.

Selecting the most effective baits for house rodent control. Izv.
Irk.gos.protivochum. inst. 13:106-112 '54. (MIRA 10:12)
(RODENT CONTROL) (RATS) (MICE)

TOLKACHEV, V.A.; MIKHAYLOV, A.I.

Nomogram for double integration of paramagnetic resonance signals.
lines. Prikl. i tekh. eksp. 9 no. 196-96 1966.

(1966) 18:3

1. Institut khimicheskoy fiziki AN SSSR.

"stepwise" recombination of free radicals in irradiated organic substances. Part 2: Formal-kinetic model and a method for evaluation of kinetic constants. *Zinn, J. R., J. Polym. Sci. Polym. Chem. Ed.*, **1978**, 16, 149-161.

... Institut für Atomphysik, Leipzig, DDDR-AN 5330.

ENT(m)/EWP(t)/EWP(k)/EWP(b) Pf-4 JD
ACCESSION NR: AP5007175 S/0206/65/000/003/0042/0043

AUTHOR: Kutsenko, A. I.; Burinova, L. I.; Moshkin, P. A.; Volkov, I. S.;
Nikolayeva, V. M.; Mikhaylov, A. I.; Korneyev, V. I.; Rogachev, L. K.; Manteyfel',
V. I.; Gapeyeva, Z. Ya.

TITLE: A cutting compound for cold finishing of metals. Class 23, No. 167939

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 3, 1965, 42-43

TOPIC TAGS: coolant, cutting fluid 4

ABSTRACT: An Author's Certificate has been granted for a coolant with the following composition: dialkylphenylphosphates or phthalic, adipic or sebacic esters or higher esters of monocarboxylic acid with alcohols containing from 4 to 10 atoms of carbon per molecule; or esters of polyhydric alcohols and monocarboxylic acids which contain from 5 to 10 carbon atoms per molecule.

ASSOCIATION: Moskovskiy avtomobil'nyy zavod imeni I. A. Likhacheva (Moscow Auto-
mobile Factory)

Card 1/1

YERMAKOV, L.K.; TYABIN, V.Ye.; MIKHAYLOV, A.K. [deceased]; KOMISSAROV, B.M.;
 PYLEVA, V.H.; SVIRIDOV, A.Ye.; NIKITINA, V.H., redaktor izdatel'stva;
 KRYNOCHKINA, K.V., tekhnicheskij redaktor

[Production norms for geodetic and topographical work in geological prospecting and geophysical organizations. Supplement to the unified production norms for geodetic and topographical work in the Chief Administration of Geodesy and Cartography of the Ministry of Interior of the U.S.S.R.] Normy vyrabotki na geodezicheskie i topograficheskie raboty geologo-razvedochnykh i geofizicheskikh organizatsii. Dopolnenie k edinyim normam vyrabotki na geodezicheskie i topograficheskie raboty GUGK MVD SSSR 1954 g. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1956. 51 n. (MLRA 10:1)

1. Russia (1923- U.S.S.R.) Ministerstvo geologii i okhrany nedr.
2. Ministerstvo geologii i okhrany nedr SSSR (for Yernakov) 3.
- Ministerstvo neftyanoy promyshlennosti SSSR (for Pyleva) 4. Minister-
- stvo ugol'noy promyshlennosti SSSR (for Sviridov)
- (Geodesy) (Cartography)

MIKHAYLOV, Aleksandr Konstantinovich; KOL'TSOV, F.P., red.; STEFANOV,
N.S., tekhn. red.

[New building materials made of local raw material] Novye
stroitel'nye materialy iz mestnogo syr'ia. Cheboksary,
Chuvashskoe gos. izd-vo, 1961. 105 p. (MIRA 15:11)
(Chuvashia--Building materials industry)

L 26463-66 ENT(1)/T JK

ACC NR. AP6017378

(A, N) SOURCE CODE: UR/0358/65/034/006/0733/0737³²_B

AUTHOR: Favorova, L. A.; Chernyshova, T. F.; Beshcheva, N. I.; Mikhaylov, A. K.

ORG: Institute of Epidemiology and Microbiology im. N. F. Gamaleya, AMN SSSR
(Institut epidemiologii i mikrobiologii AMN SSSR); Psychiatric Clinical Hospital
No. 1 im. P. P. Kashchenko, Moscow (Psikhiatricheskaya klinicheskaya bol'nitsa No. 1)TITLE: Possibility of the transmission of tick-borne recurrent fever by lice:
Report II. Fate of the spirochetes of tick-borne recurrent typhus in the organism of
the body louse during the first few days following intake of infected bloodSOURCE: Meditsinskaya parazitologiya i parazitarnyye bolezni, v. 34, no. 6, 1965,
733-737TOPIC TAGS: medical experiment, animal parasite, experiment animal, infective
disease, pathogenesisABSTRACT: The authors present the results of experiments with the infection
of lice by tick-borne recurrent fever during pyrotherapy of six patients with
progressive paralysis by means of inoculation with tick-borne spirochetosis.
The lice were fed with the blood of patients and were then pulverized in a
motar, combined with 1 cc of saline solution and intraperitoneally administered
to guinea pigs. Of the 55 guinea pigs injected, 43 became infected and 21

Card 1/2

UDC: 616.986.5-022.39:595.751.2+595.751.2.082.2:576.856.5

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ACC NR: AP6017378

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died. The lice were dissected by the method described by Beechcheva (1949) and analyzed for the presence of spirochetes. Findings: Spirochetes of tick-borne recurrent typhus survive for the first few (up to 12) hours in the stomach of body lice fed with the blood of infected patients: this time span corresponds to the time span required to digest the blood. During the first 12 hours following intake of infected blood a negligible number of these spirochetes penetrates into the louse hemolymph. And it is exactly during these first 12 hours that the guinea pigs remain susceptible to infection with the louse suspension. This indicates that the morbidity of guinea pigs due to injection with infected lice during the first few hours following the feeding of lice with infected blood was attributable to the mechanical transfer of spirochetes together with the still undigested blood of the patient in the stomach and intestine of lice. Orig. art. has: 2 figures and 4 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: 28May64 / ORIG REF: 003

Card 2/2 RB

MIKHAYLOV, A.K., inzh.

Distribution of losses in a stage of spiral multi-stage low-speed pumps. Trudy VIGM no.24:198-218 '59. (MIRA 12:8)
(Pumping machinery)

MIKHAYLOV, A.K., inzh.

Distribution of pressure in the side channel of a blade
wheel in various operating conditions of a centrifugal
pump. *Energomashinostroenie* 6 no.7:26-27 J1 '60.
(MIRA 13:7)

(Centrifugal pumps)

S/193/60/000/008/010/018
A004/A001

AUTHORS: Kornilov, A. N., Mikhaylov, A. K.,

TITLE: The ПЗ500-180 (PE 500-180) Feed Pump Installation

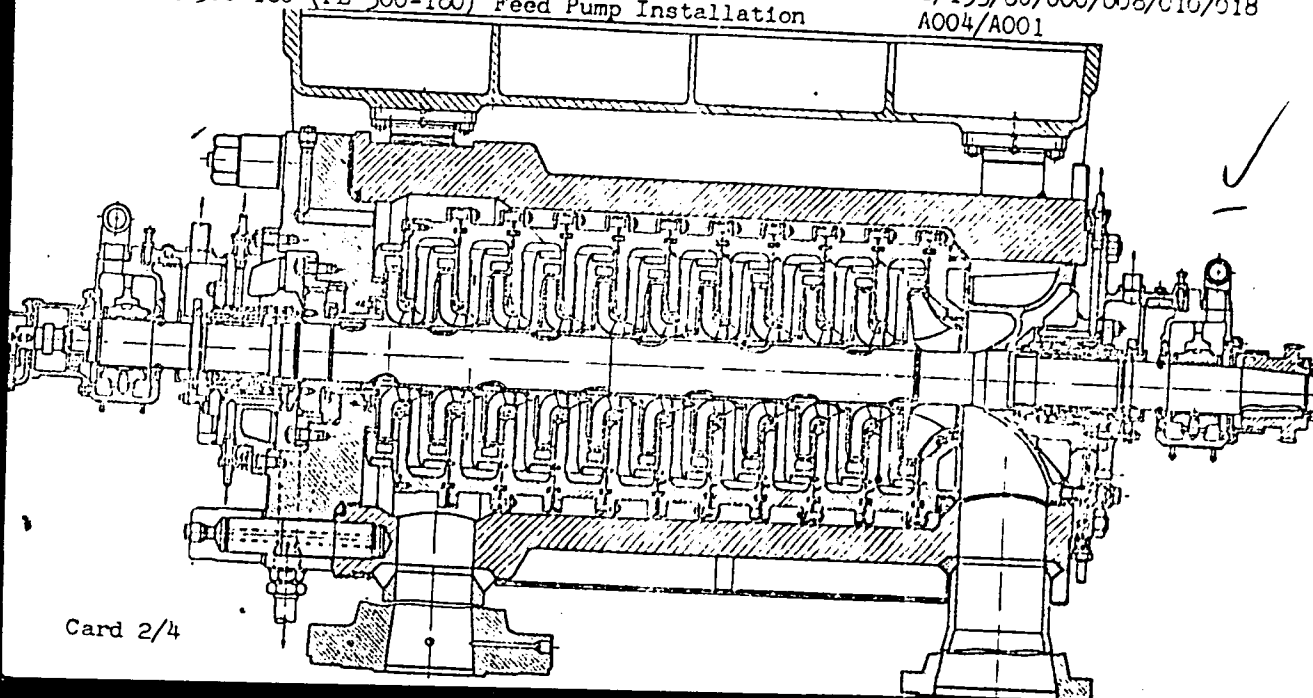
PERIODICAL: Byulleten' tekhniko-ekonomicheskoy informatsii, 1960, No.8, pp. 37-40

TEXT: The Vsesoyuznyy nauchno-issledovatel'skiy institut gidromachinostro-
yeniya (All-Union Scientific Research Institute of Hydraulic Machinery), VIGM,
together with the spetsial'noye konstruktorskoye byuro pitatel'nykh nasosov
(Special Design Office of Feed Pumps), SKB PN, and the Sumskiy nasosnyy zavod
(Summy Pump Plant) have developed in 1959 the PE 500-180 feed pump installation
intended for the feed of boilers with a pressure of 140 atm, the boilers being
installed in high-power thermal power stations. The installation is composed of
the pump, the ATM-3500-2 electromotor, the МГ-65Х2 (MG-65 X2) hydraulic coupling,
a check valve with automatic by-pass, lubrication installation and instrumentation
system (KIP). The illustration shows a longitudinal section of the feed pump
which is a double-housing structure of the section type. The outer housing is a
forged steel cylinder, while the inner housing is an assembled structure with
vertical joints, composed of 11 stages and guiding devices of the blade type.

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The PE 500-180 (PE 500-180) Feed Pump Installation

3/193/60/000/008/C10/018
A004/A001



Card 2/4

The ПЗ 500-180 (PE 500-180) Feed Pump Installation

S/193/60/000/008/010/018
A004/A001

The section seams are built up with austenite steel, the guiding devices and impellers are made of 2X13 (2Kh13) grade steel, while the delivery parts are made of heat-treated stainless steel. The pump ends are sealed with soft packings. The stuffing-box sockets and the internal hollow of the stuffing-box jacket of the end seals are cooled by a cold condensate of less than 40°C. The individual lubrication system of the pump installation consists of the following units: screw-type BH-25 (VNL-25) oil pump mounted on the electromotor of the installation; start-reserve screw-type ЗВН-25 (EVN-25) oil pump driven by an a-c electromotor; gear-type PЗ-3 (RZ-3) oil feed pump with a-c electromotor; two MO-25X4 (MO-25 X 4) oil coolers, oil filter with a filtering area of 1.5 m² and 2.8 m³ capacity oil tank. The pump installation is equipped with automatic control devices, protection, checking and signalling devices. The protection device prevents damage to the installation in the case of an oil-pressure drop, or if the critical magnitude of axial shift of the pump rotor is reached, or in case of a pressure increase in the delivery chamber of the hydraulic base, superheating of the bearings or increased vibration of the pump bearings. The installation is controlled from the main thermal panel of the boiler-turbine block. The following technical specifications of the PE 500-180 feed pump installation are given:

- 1) feed pump: output - 500 m³/hour; pressure in the suction pipe - 6.7 kg/cm²;

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S/193/60/000/008/C10/C18 ✓
A004/A001

The П500-180 (PE 500-180) Feed Pump Installation

pressure in the delivery pipe - $186 \pm 5 \text{ kg/cm}^2$; pressure head in the suction pipe exceeding the vapor pressure - 15 m liquid column; feed water temperature - 160°C ; rpm of pump - 2,900; productivity range - 500-200 m^3/hour ; 2) hydraulic coupling: rated power at 3% slippage - 4,000 kw; rpm of driving shaft - 2,980; rpm of driven shaft at 100% admission of hydraulic coupling and 2.7% slippage - 2,900; hydraulic coupling efficiency - 97%; 3) АТМ-3500-2 electromotor: rated power - 3,800 kw; revolutions per minute - 2,980; voltage - 6,000 or 3,000 v. Test results of the pump installation carried out at the TETs-12 Mosenergo showed that the efficiency of the pump amounted to 76% at an output of 500 m^3/hour , i. e., by 4% higher than stipulated by the terms of delivery. There is 1 figure.

Card 4/4

MIKHAYLOV, A. K.

Cand Tech Sci - (diss) "Study of the operating process of degree of centrifugal pump with high-speed /bystrokhodnost' of 70-90." Moscow, 1961. 16 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Order of Lenin Power Inst); 200 copies; price not given; (KL, 7-61 sup, 241)

MIKHAYLOV, A.K., inzh.

Study of the stages of a centrifugal feed pump with different
circulation of the incoming flow. Energomashinostroenie
7 no.4:17-20 Ap '61. (MIRA 14:7)
(Pumping machinery)

MIKHAYLOV, A.K., inzh.

Choice of an optimum number of channels of the outlet device of
a multistage centrifugal pump. Energomashinostroenie 9 no.8:
22-25 Ag '63. (MIRA 16:8)
(Pumping machinery)

MIKHA

137-58-1-1240

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 1, p 166 (USSR)

AUTHORS: Shul'ga, N. G., Mikhaylov, A. K.

TITLE: Some Data on the Sulfidation of Steel and Iron (Nekotoryye dannyye no sul'fidirovaniyu stali i chuguna)

PERIODICAL: Nauchn. zap. L'vovsk. politekhn. in-t, 1956, Nr 43, pp 130-136

ABSTRACT: An investigation of various procedures for sulfidation (S) of steel and iron. It was established that at temperatures of 200-300°C, S virtually does not occur. When S is performed at temperatures of 560-570°C in a bath, followed by holding for 1-6 hours, the bath contents being (%):

FeS 13.2, Na₂SO₄ 3.4, K₄Fe (CN)₆ 3.4,

the rest being neutral chlorine salts, a diffusion layer is formed. The structure of the sulfides is complex and is not always revealed by etching. S increases the wear resistance of steel and iron to friction with lubricant. Under the conditions of solid friction, S affords no advantages. Bibliography: 10 references.

Card 1/1

M. Ch.

1. ~~Steel--Sulfation--Processes~~ 2. ~~Iron--Sulfation--Processes~~

S/137/61/000/C12/005/149
A006/A101

AUTHORS: Shul'ga, N.G., Mikhaylov, A.K.

TITLE: Investigating the effect of some factors on stability of base metal thermocouples

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 12, 1961, 13, -abstract 12B83 ("Dokl. L'vovsk politetkhn. in-ta", 1958, v. 2, 307 - 312)

TEXT: An investigation was made of the causes affecting the deviations of thermocouple readings during their operation. The experimental set-up is described, maximum deviations and readings of the thermocouples are presented, obtained during holding and periodical checking at constant temperature. The accuracy of the thermocouple readings is influenced by 1) non-homogeneity of the thermo-electrode material, 2) changes in the metal structure during operation of the thermocouples; 3) errors in the measurement of thermo-emf; 4) presence of parasitic thermo-emf in the connecting conductors and terminals; 5) insufficient immersion depth of the thermocouple into the medium where the temperature is determined. The greatest effect on the stability of thermocouple readings is exerted by the degree of homogeneity and structural changes of the metal during

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Investigating the effect ..

S/137/61/000/012/005/149
A006/A10.

their operation. Conditions employed in non-ferrous metallurgy for annealing a thermo-electrode base-metal wire, do not assure a metal structure which is stable in operation. Annealing at 850 - 900°C for 8 hours of copel wire, and 8-hour-annealing at 1,150 - 1,200°C of chromel and alumel wires (3.2 mm in diameter), assure the production of thermocouples more stable in operation in which the thermo-emf may vary within $\pm 0.5 - 0.75\%$ ✓

V Oparysheva

[Abstracter's note. Complete translation]

Card 2/2

S/112/60/000/006/012/032

Translation from: Referativnyy zhurnal, Elektrotehnika, 1960, No. 6, p. 247,
4.4795

AUTHOR: Mikhaylov, A. K.

TITLE: On Raising the Stability of Thermocouples Made of Base Metals

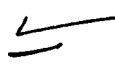
PERIODICAL: Byul. tekhn.-ekon. inform. Sovnarkhoz L'vovsk. ekon. adm. r-na,
1958, No. 8, pp. 38-41

TEXT: The stability of chromel-alumel and chromel-copel thermocouples in an oxidizing air medium (without protective covers) has been tested during holding at temperatures ranging from 300 to 1,000°C and 300 to 700°C, respectively, for 1,580-2,750 hours. The studies have shown that these thermocouples exceed the limits set by "ГОСТ 3044-45" (GOST 3044-45) in respect to the stability of temperature indications, since a change of the chemical composition of electrodes takes place. Thermocouples subjected to stabilizing annealing have a better chemical and structural homogeneity of electrodes and a satisfactory working stability. It is recommended to anneal chromel-alumel at a temperature of

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On Raising the Stability of Thermocouples Made of Base Metals

1,100-1,150°C during 8-10 hours or at 1,200°C during 6-8 hours. It is recommended to anneal copel at 850-900°C during 8-10 hours. The annealing medium for chromel and alumel must be neutral or weakly oxidizing and for copel weakly reducing. 

A. A. B.

Card 2/2

SOV/24-59-2-14/30

AUTHORS: Zavalishin, D. A., Mikhaylov, A. K. (Leningrad)

TITLE: Conversion of Direct Current into Alternating Current by Means of a Contact-Type Converter (Preobrazovaniye postoyannogo toka v peremennyy pri pomoshchi kontaktnogo preobrazovatelya)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Energetika i avtomatika, 1959, Nr 2, pp 93-98 (USSR)

ABSTRACT: An attempt is made to give a qualitative analysis and some results of an experimental investigation of a mains-controlled converter which operates as an inverter. The transition from the rectification regime to the inversion in a contact-type converter can be done in two ways: (1) by changing the direction of the direct current in the circuit while the polarity of the voltage of the generator and the load is unchanged during the operating part of the period; (2) by changing the polarity of the voltage during the operating part of the period, while the direct of the current is unchanged. The first method appears to be impracticable due to the arcing of the contacts. A three-phase bridge-type converter can be constructed in the manner illustrated in Fig 1, where: (1) T is a 3-phase transformer; (2) D_a,

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Conversion of Direct Current into Alternating Current by Means of a Contact-Type Converter

D_b and D_c are saturated chokes of the phases A, B and C; (3) O_f are magnetizing windings of the chokes; (4) k_{al} , k_{bl} and k_{cl} are "cathode" contacts; (5) CD is a smoothing choke, and (6) R_b is a ballast resistance. The operation of the converter is explained by the waveforms of Fig 2. The waveforms of Fig 2a illustrate the rectification regime of the device, while Fig 2b shows the inversion operation by employing the first method. Fig 2v explains how the inversion is achieved by the second method. The transition from the rectification to the inversion by means of the second method can be explained as follows. The magnitude of the rectified voltage can be controlled by varying the regulation angle α (see Fig 1) from 0 to 90° ; the rectified voltage is thus varied from its maximum value E_{go} to 0. If α is further increased, or if β is changed from 90° to 0 (where $\beta = 180^\circ - \alpha$), the rectified current changes its polarity. Now, if a d.c. source is connected of the "rectifier", the converter will take power from the source instead

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Conversion of Direct Current into Alternating Current by Means of a Contact-Type Converter

of supplying it. The converter thus becomes a mains-controlled inverter which supplies power from the d.c. source to the a.c. mains. A successful inversion can be achieved by fulfilling the following requirements: (1) the regulation angle α of the converter should be variable from 0 to 180° ; (2) the phases of the magnetizing currents in the chokes of the bridge circuit (see Fig 1) should be adjustable with respect to the voltages of the transformer; (3) the voltage of the d.c. source should be adjustable in magnitude and polarity. The operation of the mains-controlled controlled contact (commutator) inverter is essentially similar to that of a contact rectifier, except that the angle β has a certain minimum value which must be strictly observed. The authors carried out an experimental investigation of an inverter of the type shown in Fig 1. The system operated up to 60 kW and had the primary alternating voltage of 500 V. The d.c. source had a potential of 300 V. The experimental investigation fully corroborated the theoretical prediction. The experimental results are illustrated in Figs 5 and 6. The solid curves of Fig 5 illustrate the dependence of the inverted voltage $U_{g\beta}$ on the load current

Card 3/4 $I_{g\beta}$; the dashed curves show the inverted power, while the

SOV/24-59-2-14/30

Conversion of Direct Current into Alternating Current by Means of a
Contact-Type Converter

dash-dot curves give the useful load power. Fig 6 illustrates the dependence of the power factor $\cos \phi$ and efficiency η on the load current $I_{g\beta}$. It is seen that η is almost constant when the load changes from 100 to 25%. There are 6 figures.

ASSOCIATION: Institut elektromekhaniki, Ak. SSSR (Institute of
Electromechanics of the Academy of Sciences of the USSR)

SUBMITTED: July 15, 1958.

Card 4/4

MIKHAYLOV, A. K.

Cand Tech Sci - (diss) "Effect of several factors on the structure and stability of thermocouples made of non-noble metals." L'vov, 1961. 16 pp; (Ministry of Higher and Secondary Specialist Education UKRAINIAN SSR, Kiev Order of Lenin Polytechnic Inst); 120 copies; price not given; (KL, 7-61 sup, 241)

S/137/62/000/006/097/163
A16C/A101

AUTHOR: Mikhaylov, A. K.

TITLE: An investigation of the changes of the electric resistance and of the thermo-emf of the thermoelectronic wire during cold plastic deformation and subsequent annealing

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 6, 1962, 15, abstract 6186 ("Dokl. L'vovsk. politekhn. in-ta", v. 5, no. 1, 1961, Mekhanika, 220 - 225)

TEXT: Investigated were samples from Chromel, Alumel and Copel (diameter of the samples - 3.2 mm) after cold plastic deformation and subsequent annealing. The electric resistance was determined with the help of a direct-current MBЛ-47 (MVL-47) bridge. It was found out that, when increasing the degree of deformation up to 75 - 80%, the specific electric resistance ρ of Chromel also increases, and decreases in case the degree of deformation is further increased. In Alumel, ρ somewhat increases if the deformation is 10 - 15%, it decreases by 10 - 11% in case the deformation is up to 50%, and it again increases at a higher degree of deformation. In Copel, ρ decreases if the deformation is up to 10%, it increases

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Investigation of the...

S/137/62/000/006/097/163
A160/A161

during a subsequent deformation up to 36.5%, then it drops at a deformation of up to 50.5%, and again increases at a higher degree of deformation. It was determined that ρ changes anomalously in thermoelectrode alloys during cold plastic deformation and subsequent recrystallization annealing. During the process of recrystallization, ρ does not recover its initial state, but remains on a higher level reached during the process of cold plastic deformation. The magnitude of the thermo-emf depends on the preceding cold plastic deformation; in Chromel and Alumel, the thermo-emf decreases to 3.5% if the degree of the deformation is increased up to 50 - 65%, and it grows to its initial state at a higher degree of deformation.

V. Srednogorska

[Abstracter's note: Complete translation]

MIKHAYLOV, A. K.

Therapeutics, Suggestive

Review of K. I. Platonov's book "Suggestion and hypnosis in the light of Pavlov's theory." A. K. Mikhaylov. Zhur. nevr. i psikh. 52 no. 7, 1952.

Monthly List of Russian Accessions, Library of Congress, November 1952 UNCLASSIFIED.

MIKHAYLOV, A.K.

MYASHNIKOV, A.L., professor, redaktor; VISHNEVSKIY, A.A., professor; CHER-
NIGOVSKIY, V.N., professor; SHMIDT, Ye.V., professor, doktor meditsin-
skikh nauk; MIKHAYLOV, A.K., redaktor; SACHEVA, A.I., tekhnicheskii
redaktor.

[Sleep therapy; transactions of the enlarged session of the Pre-
sidium of the Academy of Medical Sciences of the U.S.S.R. with
participation of the Ryazan I.P. Pavlov Medical Institute on
February 27-28, 1953] Lechenie snom. Trudy rasshirennogo zasedaniia prezidiuma Akademii meditsinskikh nauk SSSR s uchastiem Riazanskogo meditsinskogo instituta imeni I.P. Pavlova 27-28 fevralia 1953 g. Red. kollegiia: A.L. Miasnikov (otv.red.) i dr. Moskva, Gos. izd-vo meditsinskoi lit-ry, 1954. 217 p. (MLRA 7:12)

1. Deystvitel'nyy chlen AMN SSSR (for Myasnikov, Chernikovskiy). 2. Chlen-korrespondent AMN SSSR (for Vishnevskiy) 3. Akademiya meditsinskikh nauk SSSR, Moscow.
(Sleep--Therapeutic use)

MIKHAYLOV, A.R.

USSR/Miscellaneous - Social welfare

Card 1/1 Pub. 77 - 11/23

Authors : Khachatur'yan, A. A., and Mikhaylov, A. K.

Title : Harmful survivals of the past

Periodical : Nauka i Zhizn' 21/10, 26-28, Oct 1954

Abstract : Alcoholism in the Soviet Union is called a survival of capitalism. An exposition is given of the physiological aspects of drunkenness with a view to dissuade the public from indulgence in it.

Institution : ...

Submitted : ...

KHACHATURYAN, A.A.: MIKHAYLOV, A.K., vrach-psikhiatr

Sleep and dreaming. Nauka i zhizn' 22 no.6:37-39 Je '55.
(MLBA 8:8)

1. Starshiy nauchnyy sotrudnik Instituta psikiatrii Minister-
stva zdravookhraneniya SSSR (for Khachaturyan)
(Sleep) (Dreams)

MIKHAYLOV, A.K. (Moskva)

Conditioned reflex method in therapeutic hypnotism. Vrach.delo
no.11:1205 N '56. (MLRA 10:3)

1. Psikhonevrologicheskaya gorodskaya klinicheskaya bol'nitsa No.1
in. P.P.Kashchenko.

(CONDITIONED RESPONSE) (HYPNOTISM--THERAPEUTIC USE)

MIKHAYLOV, A. K. vrach (Moskva)

What one should know about convulsions in epilepsy. Med.sestra 15
no.6:13-14 Je '56. (MLRA 9:9)
(EPILEPSY)

ZINOV'YEV, P.M. (Moskva); MIKHAYLOV, A.K. (Moskva); KHACHATURYAN, A.A.
(Moskva)

"Psychiatry." V.A.Giliarovskii. Reviewed by P.M.Zinov'ev, A.K.
Mikhailov, A.A.Khachaturian. Klin.med. 34 no.9:93-95 S '56.
(PSYCHIATRY) (MLRA 9:11)
(GILIAROVSKII, V.A.)

MIKHAYLOV, A.K. (Moskva)

~~MIKHAYLOV, A.K.~~
Epilepsy. Fel'd 1 akush. 23 no.2:3-8 P '58.
(EPILEPSY)

(MIRA 11:3)

MIKHAYLOV, A.K., KHACHATUR'YAN, A.A. (Moskva)

"Clinical aspects of tetraethyl lead psychosis" by A.A. Portnov.
Reviewed by A.K. Mikhailov, A.A. Khachatur'ian. Klin.med. 36 no.9:
152-153 S'58 (MIRA 11:10)
(PSYCHOSES)
(LEAD--TOXICOLOGY)

MIKHAYLOV, A.K.

Materials on the study of the tonus and reactions of the vegetative nervous system in epileptics. Vop. psikh. no. 3:294-302 '59.

(MIRA 13:10)

1. Moskovskaya gorodskaya Bol'nitsa im. P.P. Kashchenko.
(NERVOUS SYSTEMS, AUTONOMIC) (EPILEPTICS)

MIKHAYLOV, A.K. vrach; KLENOVA, V.A., meditsinskaya sestra.

S.S.Korsakov on the peculiarities of care for mental patients.
Med.sestra 18 no.9:40-43 S '59. (MIRA 12:11)
(KORSAKOV, SERGEI SERGEEVICH, 1854-1900)
(PSYCHIATRIC NURSING)

MIKHAYLOV, A.K.; SHNYROVA, V.S. (Moskva)

"Neuropathology and psychiatry" by G.V.Morozov, V.A.Romashenko.
Reviewed by A.K.Mikhailov, V.S.Shnyrova. Vol'd. 1 akush. 24
no.5:59-60 My '59. (MIRA 12:8)

(NERVOUS SYSTEM--DISEASES) (PSYCHIATRY)
(MOROZOV, G.V.) (ROMASHENKO, V.A.)

ZINOV'YEV, P.M.; MIKHAYLOV, A.K.; KHACHATURYAN, A.A. (Moskva)

Review of the book "Textbook of psychiatry" by O.V. Kerbikov, N.I.
Ozeretskiy, Ye.A. Popov, A.V. Snezhnevskiy. Klin.med. 37 no.9:156-
158 S '59. (MIRA 12:12)

(PSYCHIATRY) (KERBIKOV, O.V.) (OZERETSKIY, N.I.)
(POPOV, Ye.A.) (SNEZHNEVSKIY, A.V.)

MIKHAYLOV, A.K., vrach

Psychotherapy of epileptic patients. Vop. psikh. no.4:178-181 '66.
(MLA 5:2)

1. Psikhonevrologicheskaya bol'nitsa imeni Kashchenko, Moskva.
(EPILEPTICS) (PSYCHOTHERAPY)

MIKHAYLOV, A.K., vrach-psikhiatr

Neuroses. Nauka i zhizn' 27 no.10:77-78 O '60.
(Neuroses)

(MIRA 13:10)

ANDREYEV, A.L.; MIKHAYLOV, A.K.

"Problems in the clinical aspects and pathophysiology of epilepsy"
by S.F.Semenov. Reviewed by A.L.Andreev, A.K.Mikhailov. Zhur. nevr.
i psikh. 60 no.11:1544-1545 '60. (MIRA 14:5)
(EPILEPSY) (SEMENOV, S.F.)

MIKHAYLOV, A.K. (Moskva)

Prevention of psychogenic exacerbations of epilepsy. Vrach. delo
no. 3:87-90 Mr '61. (MIRA 14:4)

1. Institut psikiatrii Akademii meditsinskikh nauk SSSR.
(EPILEPSY)

MIKHAYLOV, A.K., vrach; KLENOVA, V.A., meditsinskaya sestra

Characteristics for care of patients with manic-depressive psychosis.
Med. sestra 20 no.8:44-49 Ag '61. (MIRA 14:10)
(MANIC-DEPRESSIVE PSYCHOSES)

MIKHAYLOV, A.K. (Moskva)

"First aid in mental diseases" by G.IA.Avrutskii. Reviewed by A.K.
Mikhailov. Fel'd. i akush. 26 no.8:62-63 Ag '61. (MIRA 14:10)
(MENTAL ILLNESS) (AVRUTSKII, G.IA.)

MIKHAYLOV, A.K., vrach; LEVUSHKINA, A.F., fel'dsher

First aid for the mentally ill. Fel'd. 1 akush. 26 no.9:29-37
8 '61. (MIRA 14:10)

(MENTALLY ILL—CARE AND TREATMENT)

MIKHAYLOV, A.K.; LEVUSHKINA, A.F., fel'dsher (Moskva)

Characteristics of care for patients suffering from seizures.

Fel'd. i akush. 26 no.10:52-54 O '61.

(MIRA 14:11)

(EPILEPTICS--CARE AND TREATMENT)

MIKHAYLOV, A.K., vrach-psikhiatr

Treatment of schizophrenia. Nauka i zhizn' 28 no. 2:78-79
F '61. (MIRA 14:2)

1. Institut psikiatrii AMN SSSR.
(Schizophrenia)

MIKHAYLOV, A.K.

"Hypochondriac schizophrenia" by G.A. Rotshtein. Zhur. nevr.
i psikh. 62 no.2:307-308 '63 (MIRA 16:11)

*

PAVLOVA, L.A., GIBENYKOVA, T.F.; BESHCHIEVA, N.I., MIKHAILOV, A.R.

Possibility of transmission of tick-borne recurrent typhus by
lice. Report No.2: Fate of the spirochetes of tick-borne
recurrent typhus in the organism of the body louse in the
first 24 hours following the infective feeding. Med. parazit.
i parazit. bol. 34 no. 7:732-737. N.I. 1965. MIRA 1965

Institut epidemiologii i mikrobiologii imeni N.I. Gumbel
AMN SSSR i Psikiatricheskaya klinicheskaya bol'nitsa No.1
imeni E.I. Kashchenko, Moscow. Submitted May 22, 1965.

SOV/123-59-12-453-2

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 12, p 67 (USSR)

AUTHOR: Mikhaylov, A.L.

TITLE: New Devices in the Forge Shop of the Rostsel-mash Plant (Rostov Agricultural Machine Building Plant imeni Stalin)

PERIODICAL: Byul. tekhn.-ekon. inform. Sovnarkhoz Rostovsk. ekon. adm. r-na. 1958, Nr 6, pp 7-8

ABSTRACT: Machine parts - left and right journals, sector axles and cardan cross-pieces - will be manufactures on 1,500-ton forging presses by the flash-less pressing method instead of making them on horizontal forging machines. In the storing section of the shop, the mechanical disk saws have been replaced by a semi-automatic machine for cutting tubes and bars of various diameters and cross-sections with the aid of abrasive disks. The output of the machine amounts to 300 pieces/hour. The new cutting technology resulted in saving 500 thousand rubles per year. 3 figures.

I.N.N.

Card 1/1

L 23593-65 ENT(m)/EFF(c)/ENP(j)/T Pc-4/Pr-4 RM

ACCESSION NR: AP5003840

S/0190/65/007/001/0180/0180

AUTHOR: Adadurov, G. A.; Barkalov, I. V.; Gol'danskiy, V. I.; Dremis,
A. N.; Ignatovich, T. N.; Mikhaylov, A. M.; Tal'roze, V. L.; Yampol'
skiy, P. A.

TITLE: The phenomenon of polymerization in a shock wave

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 1, 1965, 180

TOPIC TAGS: polymerization, shock wave, methacrylamide, trioxane, explosion, polyoxymethylene

ABSTRACT: A study has shown that a monomer in the condensed state can be made to polymerize by passing a shock wave through it. Powdered methacrylamide and trioxane were pelletized and subjected to the action of a shock wave with a wave front pressure of $1.5-3 \times 10^4$ atm abs produced by the explosion of trotyl-hexogen. The temperature in the pellet-containing capsule immediately after the explosion did not exceed 50C and dropped to room temperature in a few minutes. Methacrylamide formed a polymer decomposing at about 270C with a

Cord 1/2

L 23593-65
ACCESSION NR: AP5003840

yield of 5% on the monomer. In trioxane the polymer yield was 3%;
the polymer behaves similarly to polyoxymethylene. Studies of poly-
merization in a shock wave are planned for other monomers. [SM]

ASSOCIATION: none

SUBMITTED: 24Jun64

ENCL: 00

SUB CODE: GC, ME

NO REF SOV: 001

OTHER: 000

ATD PRESS: 3171

Card 2/2

MIKHAYLOV, A.M., bul'dozerist.

How to increase the performance of bulldozers. Avt.dor. 21 no. 3:12-14
Mr '58. (MIRA 11:3)

(Bulldozers)

MIKHAYLOV, Arseniy Mikhaylovich

[Trade unions of White Russia in the struggle for the fulfillment of the fourth five-year plan in industry] Profsoiuzy Belorussii v bor'be za vypolnenie chetvertoi piatiletki v oolasti promyshlennosti. Minsk, Izd-vo M-va vysshego, srednego spets. i prof. obrazovaniia BSSR, 1961. 129 p. (MIRA 15:10)
(White Russia—Trade unions)
(White Russia—Industries)

25627/10-12 and Weed Control

Abstr Jour : Ref zhur - Biol., No 5, 1958, No 39665

Author : Savel'ev, S.I., Mikhaylov A.M.

Institution : Saratov Agricultural Institute

Title : The Control of Weeds by Applying Dry Herbicides into the Soil.

Orig. Pub : Zemledelie, 1957, No 4, 50-53

Abstract : The application of 2,4-D in a dry form was studied in 1956 in Saratovskaya Oblast. By placing 2,4-D in a fallow field (10 and 20 kg/ha) and working it to the depth of 20 and 30 cm the pink star and others totally destroyed. All roots and root sprouts which in the soil layer of between 50 and 60 cm deep. The application of 2,4-D in a dose of 5 kg/ha under the plowing cut the growth of lettuce (lactuca) in half. In dry preparation in dose of 5 kg/ha was introduced in fallow for a summer cultivation in 1956 in the kollehoz near Frunze. This method was effective only for the control of under-age weeds (amaranth, sunflower's windfall) and lettuce.

Card : 1/2

6

MIKHAYLOV, A. M.

PA 228T98

USSR/Metallurgy - Foundry Practice

May 52

"Easily Removable Risers With Chamotte-Clay Separating Plates," A. M. Mikhaylov, I. P. Fominykh, Kovrov Excavator Plant

"Litey Proizvod" No 5, pp 28, 29

Discusses application of plates made of chamotte-clay mixt and describes expts for establishing effect of sepg plates on metal of castings and proper technology of plate manuf. Decisive factor in good quality of plates is temp of burning, which has to be as high as 1,200°.

228T98

unclassified, etc.

Dissertation: "Increasing the stability of cast steel parts to the action of surface
erosion." Cand. Tech. Sci., Moscow Institute of Steel, Moscow, 1954. Referativno,
Zhurnal-Akademika, no. 7, Moscow, 1955, 50.

Doc. 1000000, 10 DEC 1994

MISHIN (10), 11-12

B. T. R.
Vol. 3 No. 4
Apr. 1954
Engineering Economics

② Ind. Eng 3
"1940" Planning and Calculation of Basic Cost Accounting
Indices of a Tool Shop. (Russian) A. M. Mikhailov and A.
I. Farkman. Vestnik Mashinostroeniia v. 33, no. 8, Sept. 1953,
p. 93-95.
Discusses simplification and acceleration of accounting pro-
cedures

6-4-54
JP

MILKHA LOV, A. M.

13 18
 Surface analysis of castings. A. M. Milkhalov and M. I. Serdyukov. *Ukrainian Patent* 1957, No. 6,18-12. A detailed study is given. Cores were coated with a mixt. of 80% FeCr with 6% C or with 76% FeMn with Bakelite as a binder, and placed in sand molds which were then cast with C 0.3-0.4, Mn 1.2-1.5, Si 0.2-0.4% steel at 1630-1580°. Finished castings were examd. spectroscopically for alloy distribution in the case, for the distribution of C added with the coating, and for hardness and microstructure of the case. Results are given in diagrams. The major defects observed were surface cavities and they can be eliminated, apparently, only when the m.p. of the alloy layer is higher or equal to the m.p. of the base metal. J. D. [unclear]

4
 4E2C

Hand

MIKHAYLOV, A.M., inzh.-tekhnolog

How we raised production and lowered the costs of gear
manufacture. Elek. i tepl. tiaga 3 no. 7:10-13 JI '59.
(MIRA 13:3)

1. Iyublinskiy litseyno-mekhanicheskiy zavod.
(Gearing)

25(1,2)

SOV/117-54-11/36

AUTHOR: Mikhaylov A.M. Engineer

TITLE: The Modernization of Gear Milling Machines for
Tooth Cutting in the Direction of Feed.

PERIODICAL: Mashinostroitel' 1969, No. 4, pp. 18-19 (USSR)

ABSTRACT: The described modernization, done at the Lyubimovskiy
Lityeyno-mekhanicheskiy zavod (Lyubimovskiy Factory
Machine Plant), considerably increased the efficiency
of the gear milling machine and made possible
milling in two directions - against the feed as well
as in the direction of the feed. The essence of the
modernization is a new design of the lead screw nut
in the tool post of the machine. The nut (Figure 1)
consists of two parts, the one being the nut proper
and the other a lock nut, and a spring in between.
The two nut parts screw together and work as one
solid nut in the milling process against the feed.

Card 1/3

007/117-17-44-1736

The Modernization of Gear Milling Machines for Tooth Cutting in
The Direction of Feed.

and when the process reverses to milling in the same direction with the feed - the spring presses the lock nut upward against the lead screw thread and makes it turn together with the screw until the two nut parts lock again smoothly without impact and the tool post displaces smoothly. The installation of the nut requires no redesigning in the machine. The information includes detailed engineering recommendations and the calculation formula for the lead of the spiral butt faces by which the two nut parts are contacting. The nut has proved dependable and suitable also for milling machines other than gear milling machines. It reduced the tooth cutting time for one large diesel locomotive gear by 50%, improved the finish and reduced the wear on the cutting tools. It also reduced the consumption of electric energy for the cutting process by 47%.

Card 2/3

007/117-54--674

The Modernization of Gear Milling Machines for Tooth Cutting in the Direction of Feed.

(comparing with the consumption in milling against the feed). There are 2 diagrams.

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MIKHAYLOV, A.M., inzh.

Efficient grinding of high-module extra-hard gear wheels.
Mashinostroitel' no.12:14-15 D '59. (MIRA 13:3)
(Gear cutting)

MIKHAYLOV, A.M.

Copying mandrel for machining composite curves. Mashinostroitel'
no.8:20 Ag '60. (MIRA 13:9)
(Drilling and boring machinery--Attachments)

MIKHAYLOV, A.M.; POZDNYAK, Ya.B.; ASTAPOV, V.Ya.

Hydraulic copying device for the modernization of screw cutting
lathes. Mashinostroitel' no.3:12 Mr '64. (MIRA 17:4)

MIKHAYLOV, A.M.; BOGDANOV, B.L.; MEL'NIKOV, N.A.

Thermal conditions in the casting of a D-100 diesel engine
crankshaft. Izv. vys. ucheb. zav.; chern. met. 5 no.3:15'-108
'62. (MIRA 15:5)

1. Moskovskiy institut stali.

(Iron founding)

S/128/63/000/004/003/004
A054/A126

AUTHORS: Mikhaylov, A.M., Gorbul'skiy, G.F., Zvirbulis, I.A.

TITLE: Improving the wear resistance of steel castings

PERIODICAL: Liteynoye proizvodstvo, no. 4, 1963, 37 - 38

TEXT: For this purpose the metal surface is alloyed with carbon-containing ferro-chrome or manganese. Tests were carried out to improve this wear-resistant alloyed coating by addition of 4 - 6% corundum to the conventional alloys. The new coating was studied on samples and tractor parts, in comparison with castings of 30ГЛ (30GL) and Г13Л (G13L) steels without alloyed surfaces. (The test results are given in block diagrams.) The coatings of ferrochrome with 4% corundum and the corundum-containing ferrochrome + manganese alloy - irrespective of the heat-treatment conditions - decrease the wear and tear of the casting by a factor of 15, compared with the conventional coating, and compared with non-surface-alloyed 30GL and G13L steel castings by a factor of 72 and 81, respectively. The new coating was also tested on track links produced in the Zavod Rabochiy metallist (Rabochiy Metallist Plant). The track links were coat-

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Improving the wear resistance of steel castings

S/128/63/000/004/003/004
A054/A126

ed with a dense 2 - 3 mm thick metal-corundum coating that formed a tight bond with the base metal. The wear of the corundum-coated track links was by a factor of 2.8 less than that on links coated with the conventional alloy. After 50 h operation the wear of the conventional track links was 1 - 2 mm, whereas no wear could be found on the experimental ones. If more than 6% corundum is added to the coating mixture, the efficiency of the coating layer deteriorates, most probably due to disintegration of the alloy in which case the corundum particles liberated promote the wear of the metal. There are 5 figures.

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MILITARY A.M.

Device for eliminating a gap in the threaded joint of the rest
of a gear-milling machine. Stan.1 instr. 34 no.3:40-41 Mr '63.
(MIRA 16:5)

(Gear-cutting machines)

L 7083-66 EWT(m)/EWP(w)/EPF(c)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD/JW/JG
 ACC NR: AP5027275 SOURCE CODE: UR/0207/65/000/005/0090/0094

AUTHOR: Mikhaylov, A. M. (Novosibirsk)

ORG: none

TITLE: The jump-like propagation of cracks in single crystals of lithium fluoride

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 5, 1965, 90-94

TOPIC TAGS: solid state, lithium fluoride, lithium fluoride crystal, crystal dislocation, crystal crack, lithium compound/ PSK 24 motion picture camera, SKS 1M motion picture camera

ABSTRACT: To extend and apply the theory of auto-oscillations during cleavage of brittle solids (see G. I. Barenblatt and R. L. Salganik. O rasklinivanii khrupkikh tel. Avtokolebaniya pri rasklinivanii. PMM, 1963, t. 27, vyp. 3, str. 436), specific surface disintegrating energies of lithium fluoride crystals were determined. The experimental procedure followed was that of V. R. Regel' and G. A. Dubov (Registriruyushchiy pribor dlya zapisi krivyykh szhatiya, rastyazheniya i relaksatsii. Byul. "Pribery i stendy" In-ta tekhn-ekonom. inform. AN SSSR, 1956, No. 11 - 56-452, tema 2). The experimental results are presented in photographs and graphs (see Fig. 1).
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ACC NR: AP5027275

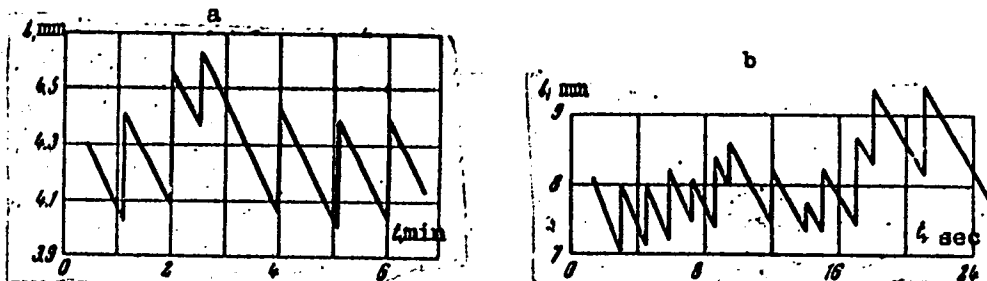


Fig. 1. Dependence of length of crack on the time for cleavage velocities of (a) 0.007 and (b) 0.7 mm/sec respectively.

The ratio of the surface disintegration energy for stationary $T(0)$ and moving $T(\sqrt{v})$ cracks respectively was determined by using the relationship

$$\frac{T'(0)}{T(v_0)} = \left(1 + \frac{\Delta l}{l_0}\right)^2,$$

where Δl is the length of a jump and l_0 is the length of a stationary crack. It was found that for cleavage velocities in excess of 20 mm/sec cracks are propagated by jumps and that the velocity of crack propagation exceeds the cleavage velocity

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several times over. Orig. art. has: 1 table, 3 graphs, 4 photographs, and 3 equations.

SUB CODE: GC/ SUBM DATE: 11Mar65/ ORIG REF: 009/ OTH REF: 005

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